

## Doktorský studijní program/Doctoral Study Program

## VYPSÁNÍ TÉMATU/LISTING OF TOPIC

Studijní program/Study Program: Nutrition and Food

Studijní obor/Branch of Study: program without field

Katedra/Department of: Center DRIFT-FOOD

Školitel, email/Supervisor, email: Diana Karina Baigts Allende, baigts\_allende@af.czu.cz

Konzultant, email/Co-supervisor, email: N/A

Forma studia/Form of Study: Full\_time

Typ tématu/*Type of Theme*: **framework** 

**Téma/Topic:** Development of hydrogels for the controlled delivery of biocompounds in food systems

**Hypotézy/***Hypotheses*: Hydrogels loaded with bioactive substances formed using biopolymers create an efficient system for targeted release.

**Anotace/Summary:** Hydrogels are three-dimensional systems made up of polymer chains that can absorb large quantities of water when they swell. Stimuli-responsive hydrogels change their size based on environmental conditions such as pH and temperature. Consequently, they can gradually collapse, releasing the bioactive compounds they contain under gastrointestinal conditions.

Zdroje financování práce/Funding Sources: DRIFT FOOD CENTER

V/In Prague dne/Date: 31.10.2024

Podpis školitele/Signature of the Supervisor:

Podpis konzultanta/ Signature of the Co-supervisor:

Podpis vedoucího katedry/Signature of the Head of the Department:

